

REMARKS

By this amendment, claims 1 and 12 have been amended and claims 29-40 have been added. Claims 8 and 9 have been previously cancelled. Accordingly, claims 1-7 and 10-40 are currently pending in the application, of which claims 1, 12, 20 and 25 are independent claims. The Office Action indicates that claims 20-28 are allowed.

In view of the above amendments and the following Remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Claim Status

Previously, claims 8 and 9 have been cancelled in the Preliminary Amendment filed on March 29, 2004. Nevertheless, the Office Action Summary indicates that claims 1-28 are pending in this application. Appropriate correction is respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 1-6, 9-13 and 15-19 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U. S. Patent No. 6,476,881 issued to Ozaki, *et al.* ("Ozaki") in view of U. S. Patent No. 5,182,661 issued to Ikeda, *et al.* ("Ikeda"). Applicant respectfully traverses this rejection for at least the following reasons.

With respect to claims 1-6 and 9-11, amended independent claim 1 recites "... the protective layer ... *being in direct contact with an upper surface of the semiconductor pattern between the source electrode and the drain electrode*". An example of this claimed feature is shown in Fig. 10 of the present application, in which the protective layer 70 is in direct contact

with an upper surface of the semiconductor pattern 42 between the source electrode 65 and the data electrode 66.

In this regard, Ozaki shows, in Fig. 9A and 10A, the protection film 39 is in direct contact with the upper surface of *the channel protection film 19B* between the source electrode 21b and the drain electrode 17b. The protection film 39 is not in any contact with the semiconductor film 109 between the source electrode 21b and the drain electrode 17b. Thus, Ozaki fails to disclose “... the protective layer ... *being in direct contact with an upper surface of the semiconductor pattern between the source electrode and the drain electrode*”.

Ikeda fails to cure this deficiency from Ozaki. Ikeda shows a cut view of the storage capacitance area in Figs. 3B, 4B and 5B, but does not show any cut view of the TFT area. Since none of the cited references discloses or suggests this claimed feature, the subject matter of claim 1 would not have been obvious from the asserted combination of Ozaki and Ikeda. Thus, it is submitted that claim 1 is patentable over the asserted combination.

Also, claim 1 recites “*repair members* provided corresponding to the pixel regions, wherein each repair member is extended from the pixel electrode corresponding thereto and overlaps a gate line of an adjoining pixel region on a previous row”. Claim 1 clearly recites that it is a *repair member*, not a *storage capacitance electrode*, that is extended from the pixel electrode.

In this regard, the Examiner admitted “Ozaki et al. do not show a plurality of extensions provided to the respective pixel regions, wherein each extension is extended from the pixel electrode of the respective pixel region and overlapping the gate line on a previous row ...”. (Office Action, page 3). Regarding this missing feature, the Examiner stated “Ikeda teach (e.g., Figures 3 and 4) to extend the pixel electrode 22 to overlap the gate line 10 of the previous row

...” and asserted “it would have been obvious to a person of ordinary skill ... to extend the pixel electrode to overlap the gate line of the previous row as taught by Ikeda et al. in the device of Ozaki et al. ...” (Office Action, page 3).

However, the extended portion of the pixel electrode 22 is used as a storage capacitance electrode, not as a repair member. Hence, it would not have been obvious to use a storage capacitance electrode as a repair member. Rather, the storage capacitance electrode portion of the pixel electrode 22 should be electrically isolated from the other storage capacitance electrode portion of the gate bus line 10. Thus, Ikeda teaches away from using the storage capacitance electrode portion of the pixel electrode 22 as a repair member.

For these reasons, it is submitted that claim 1 is patentable over the asserted combination of Ozaki and Ikeda. Claims 2-6 and 9-11 that are dependent from claim 1 would be also patentable at least for the same reasons.

With respect to claims 12, 13 and 15-19, amended independent claim 12 recites “a protective layer ... in direct contact with an upper surface of the semiconductor pattern between the source electrode and the drain electrode”. As previously mentioned, this claimed feature is not disclose or suggested from the asserted combination of Ozaki and Ikeda. Thus, it is submitted that claim 12 is patentable over the cited references. Claims 13 and 15-19 that are dependent from claim 12 would be also patentable at least for the same reasons.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 103(a) rejection of claims 1-6, 9-13 and 15-19.

Claims 7 and 14 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Ozaki in view of Ikeda, further in view of U. S. Patent No. 5,909,263 issued to Song.

Applicant respectfully traverses this rejection for at least the following reasons.

Claims 7 and 14 are dependent from independent claims 1 and 12, respectively. As previously mentioned, amended claims 1 and 12 are patentable over Ozaki and Ikeda. For example, Ozaki and Ikeda fails to disclose or suggest "... the protective layer ... being in direct contact with an upper surface of the semiconductor pattern between the source electrode and the drain electrode" (claim 1) and "a protective layer ... in direct contact with an upper surface of the semiconductor pattern between the source electrode and the drain electrode" (claim 12).

Song is directed to an interconnection structure between the drain electrode 240 and the ITO pixel electrode, but does not disclose or suggest the protective layer being in direct contact with an upper surface of the semiconductor pattern between the source and drain electrodes, as recited in claims 1 and 12. Since none of the cited references discloses or suggests this claimed feature, it is submitted that claims 1 and 12 are patentable over Ozaki, Ikeda and Song. Claims 7 and 14 that are dependent from claims 12 and 12, respectively, would be also patentable at least for the same reasons.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 103(a) rejection of claims 7 and 14.

Other Matters

In this response, claims 29-40 have been newly added. Claims 29-31, 32-34, 35-37 and 38-40 are dependent from independent claims 1, 12, 20 and 25, respectively. They are directed to

the subsidiary data pads 82 and subsidiary gate pads 88, which are derived from the same layer with the pixel electrodes.

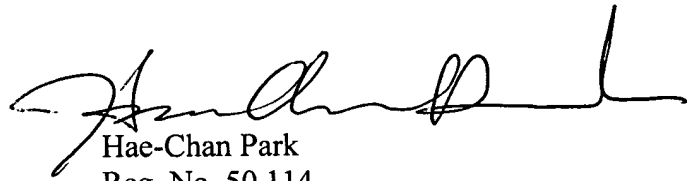
CONCLUSION

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



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